DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015018 Address: 333 Burma Road **Date Inspected:** 04-May-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure OSM Arrival Time: 1900 **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See below **CWI Present:** Yes No Yes N/A **Rod Oven in Use:** Yes No **Inspected CWI report:** No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** Tower and OBG Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

SMAW welding of weld joint SSD1-TL5-1B-F-2A located on PCMK south tower, skins A/E corner, exterior extension plate to skin A. Welder was identified as 057186. QC was identified as ZPMC CWI Du Zhi Qun (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Deng Zhi Bing, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-3213-B-U3b.

SMAW repair welding of weld joint NSD1-TL5-3B-F-40B located inside PCMK north tower. Welder was identified as 052930. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Zhu Zhong Jie, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-485-SMAW-2G(2F)-repair-1 as listed on ZPMC repair order T-CWR616 presented to this QA Inspector by QC1.

Bay 10

This QA Inspector randomly observed no welding related work in progress in Bay 10.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Heavy Dock

This QA Inspector randomly observed no welding work being performed on the Heavy Dock.

OBG Trial Assembly Area

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

FCAW welding of weld joint SSD25-PP069-047 located inside PCMK OBG 8CW, FL3 crossbeam. Welder was identified as 045227. QC was identified as ZPMC CWI Liu Hua Jie (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Feng Ya Jun, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2231T.

FCAW welding of weld joint SSD27-PP069-048 located inside PCMK OBG 8CE, FL3 crossbeam. Welder was identified as 220069. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Feng Ya Jun, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2231T. Also present at this location and appearing to be monitoring the welding operations were ABF Representatives Wang Zhong Yuan and Zhang Xiao Bo.

Flame heat straightening being performed on part number 7EE-BK1-032 in conformance with HSR1(B)-8256 and presented to this QA Inspector by ZPMC QC Wang Jie, who was not a CWI. ZPMC QC Wang Jie informed this QA Inspector that the CWI assigned to this work was QC2.

FCAW welding of weld joint OBW8B-001 located inside PCMK OBG 8AW/8BW at the transverse joint, south (crossbeam) side, upper side plate to side plate. Welder was identified as 045280. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Zhu, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2233T-1.

FCAW welding of weld joint OBW8B-002 located inside PCMK OBG 8AW/8BW at the transverse joint, south (crossbeam) side, lower side plate to side plate. Welder was identified as 045243. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Zhu, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2233T-1.

FCAW welding of weld joint OBW8B-003 located inside PCMK OBG 8AW/8BW at the transverse joint, bottom plate to bottom plate. Welders were identified as 045240, 202122. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Zhu, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2231T-1.

FCAW welding of weld joint OBW8B-004 located inside PCMK OBG 8AW/8BW at the transverse joint, north (counterweight) side, lower side plate to side plate. Welders were identified as 067079, 067876. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Zhu, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2233T-1.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

FCAW welding of weld joint OBW8B-005 located inside PCMK OBG 8AW/8BW at the transverse joint, north (counterweight) side, upper side plate to side plate. Welder was identified as 066734. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Zhu, who was not a CWI. The welding variables recorded by QC2's assistant appeared to comply with WPS-B-T-2233T-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No significant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer